STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

3'' Radius

Top of Beam

270 ksi strands

Fan ±6"

LIFTING LOOP DETAIL

1 4" \$ Sch. 40 Steel

Pipe or equivalent



Contract # 60B98

<u>NOTES</u>

Inserts for 34" \$\phi\$ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

The nominal diameter shall be $^{l}_{2}{}^{\prime\prime}$ and the nominal cross-sectional area shall be 0.153 sq. in.

Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

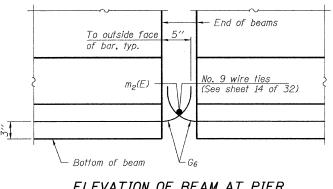
A minimum $2\frac{l}{2}''$ ϕ lifting pin shall be used to engage the lifting loops during handling.

Cut G_6 bars when necessary to maintain 1^l_2 " clearance.

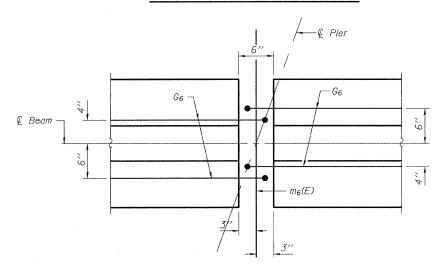
The bottom plates and study shall be galvanized according to AASHTO

Threaded rods shall be ASTM F 1554 Grade 55.

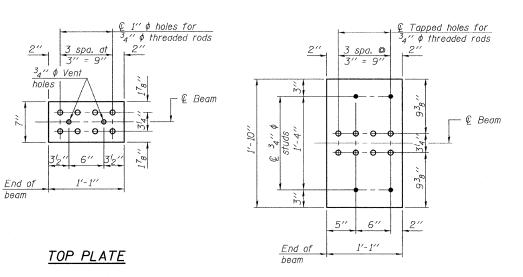
The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 42 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.



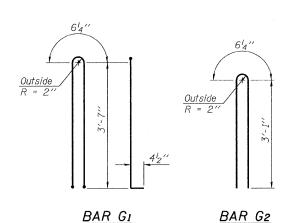
ELEVATION OF BEAM AT PIER

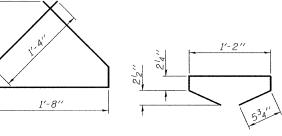


PLAN OF BEAM AT PIER









3'-0"

,,9

BAR G4

BAR G5

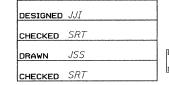
BAR G6

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42''	Ft.	2544

42" PPC I-BEAM DETAILS

EMERSON STREET OVER NORTH SHORE CHANNEL (PUBLIC BODY OF WATER) F.A.U. ROUTE 1312 SECTION 0707-B COOK COUNTY STA. 102+84.62 STRUCTURE NUMBER 016-2858



Bollinger, Lach & Associates, Inc.

PI-4-42D

12-21-06